

REMARKS

Reconsideration and allowance of the above-referenced application are respectfully requested. Upon entry of this response, claims 1-73 will remain pending.

Applicants acknowledge that the Examiner has indicated that Claims 22-28 and 30-38 contain allowable subject matter.

The Examiner rejects Claims 1-3, 6-7, 16-18, 20-21, 29, 39-53, 61, 64 and 66-73 under 35 USC §102(e) as being anticipated over Johns 6,366,289. The Examiner rejects Claims 4-5, 11-13, 19, 54-60, 62-63 and 65 under 35 USC § 103(a) as being unpatentable over Johns 6,366,289 in view of Simms 5,586,280. The Examiner further rejects Claims 8-10 and 14-15 under 35 USC § 103(a) as being unpatentable over Johns 6,366,289 in view of Morikawa et al. 6,043,897.

Applicant traverses the Examiner's grounds of rejection.

Applicant thanks the Examiner for the further explanation of his positions in the most recent communication. Applicant submits, however, that the positions set forth by the Examiner highlight the patentability of the claimed inventions rejected. In particular, the Examiner notes, contrary to the applicant's assertion in the previous amendment, that Johns does refer to a "thread" at column 15, lines 35-39. Applicant submits that is relevant for a number of different reasons.

First, this reference illustrates that one of ordinary skill in the art refers a thread as being a process that is performed by a processor. In particular, Johns notes "a separate thread or background process." Id at column 15, line 39. Accordingly, this interpretation of thread is consistent with that used in the applicant's specification, and it should so be interpreted by the Examiner. Interpreting "threads" as "chunks of data" is not appropriate since such an interpretation is inconsistent with the manner in it is used by one skilled in the art, as further evidenced by the manner in which Johns uses it.

Second, this reference to "thread" shows that the Examiner's interpretation of a "chunk of data" in Johns as a "first thread" is improper, since if Johns meant "thread," he used the word "thread." Thus, a chunk of data cannot be a thread.

The Examiner also asserted that "independent threads" and "operated upon independently" are not recited in the rejected claim 1. Applicant agrees. Claim 1 does, however, recite a "plurality" of first threads. Thus, each of the threads in this plurality is different from the other threads in the plurality. Accordingly, to the extent that the Examiner interpreted Applicant's comments as asserting that the threads in claim 1 are required to be "independent" and "operated

upon independently,” that was not intended. Nevertheless, Johns does not teach or suggest a “plurality of threads” which are each operated upon to obtain a plurality of compressed first threads. At best, Johns teaches one thread being used for normal operation, and another being used for a “background process,” as referred to at column 15, lines 35-39.

The Examiner’s reference to column 17, lines 45-51 also does not support the position that Johns teaches a plurality of threads. This passage only teaches that the “systems and methods that support the virtual frame buffer can use a variety of compression and decompression methods.” This passage does not teach or suggest having different threads which are each being operated upon to obtain compressed first threads. Further the Examiner’s reference to “compression and decompression processes” in Johns with respect to the applicant’s claim that does not even recite decompression highlights the misplaced nature of this rejection.

It is also noteworthy to point out that the Examiner did not address any of the arguments that applicant made regarding dependent claim 17. This claim is directed to creating “second threads” from the compressed first blocks, and then operating upon these second threads to obtain a “plurality of compressed second threads.” (Emphasis added). Thus, another compression operation is being performed. In light of the Examiner’s rejection of other dependent claims (such as claim 20), it appears that the Examiner is now asserting that decompressing reads upon compressing. Applicant submits that this clearly shows the Examiner’s interpretation of all the claims that refer or relate to the compressing of second threads is wrong.

Other claims rejected on anticipation grounds are also allowable, and for those claims in which arguments were previously made, they are incorporated herein. A few additional comments based upon the Examiner’s current rejections are made, however. With respect to claim 7 (in which the claim is rejected now using an entirely new line of reasoning), there is no teaching or suggestion in Johns to associate different chunks of the same type of data.

Independent claims 39 and 40 are also rejected. In contrast to the claims with the first and second threads that are both compressing blocks of digital data, these claims refer to compressing using multiple passes, and decompressing in a single pass. In explaining this rejection, it is apparent that the Examiner is inconsistently applying the term “pass.” It is not logical to assert that compressing in multiple passes means that “each newly compressed section is ‘added’ to the compressed file,” assert that Johns performs this operation, and then simply conclude that decompressing in a single pass occurs in Johns without reference to the manner in which Johns

performs this operation. What is needed is to properly interpret “multiple passes” in the manner clearly defined by the applicant, in which the number of passes refers to the number of times that a block is repetitively compressed. The term “passes” has a distinct meaning in the application, as is apparent from, for example, the “passes required” variable indicating the “the number of passes that the C/D controller estimates will be required” and in Figure 3B, which shows the step of “continue with routine at 420 for a subsequent pass.” Accordingly, a pass is not an operation performed on another section of data.

And with respect to claim 40, which is an apparatus claim with a “means for compressing ...using multiple passes,” it is additionally apparent that reference to the specification pursuant to 35 USC 112, paragraph 6.

With respect to claim independent claim 46, the Examiner’s reference to column 6, lines 1-6 for the teaching of metadata that includes a “representation of patterns” is misplaced, as there is no teaching or suggestion of such a representation of patterns in this or any other section of Johns.

Claims rejected on obviousness grounds are allowable for the above reasons, as well as the reasons set forth in the previously filed response, which are incorporated herein. Particular reference, however, to the arguments set forth with respect to claim 4 are warranted, since Simms does not teach operating upon threads in parallel. And the assertion by the Examiner that motivation to combine and obviousness is established based upon “knowledge generally available in the art” because that “would increase efficiency and reduce operation time” is wholly speculative and unsupported. While such parallel operations could potentially increase efficiency and reduce operation time, they could just as easily increase complexity and cause malfunction. On the established record, there is no support for the Examiner’s assertion.

The dependent claims rejected for this first time additionally highlight the allowable subject matter of the invention.

In particular, the examiner reads “control signals” as recited in, for example, claims 47 and 69, “on ‘control data.” Interestingly, Johns does not refer to “control data” as alleged by the Examiner (or, for consistency with the claimed language, Johns would refer to “chunk control data”), but “block control data.” (Emphasis added.) This further shows that there are not control

signals associated with each of the recited threads, as recited by many of the newly added claims.

And claims 49 and 71, which recite that the compression routine control signals indicate different compression routines for different first threads is not taught or suggested. There is not teaching or suggestion in Johns to use different compression routines for different threads. While Applicant concedes that the Johns system can be configured to operate in a lossy mode or a lossless mode, there is no teaching of using these modes together.

Also, with respect to claim 68, clearly there is no need for a "passes required" variable in Johns, and there is no teaching or suggestion of one at column 6, lines 11-16 referenced by the Examiner.

In view of the above amendments and remarks, applicant submits that the above-referenced application is in a condition for allowance, and such a notice is respectfully requested.

Respectfully submitted,
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